

ESTABLISHED 1874...

# ..MORRIS WOOD & SONS..

Chicago, Illinois, U. S. A.

CATALOG 1903



COUNTERSINKS

BORING BITS

TWIST DRILLS



FOR WOOD AND  
WOODWORKERS' TOOLS.



# NOTICE ...

**T**HIS Catalogue cancels all previous editions. In Ordering, please order by number from this catalogue. We carry in stock a large and complete line of the goods described in this catalogue and can make prompt shipment. All of our tools are carefully inspected before leaving our Factory. Prices subject to change without notice.

Respectfully,

**MORRIS WOOD & SONS.**



144 - 218

MORRIS WOOD

GEORGE WOOD

ROBERT J. WOOD

# MORRIS WOOD & SONS

31-33 South Canal St., CHICAGO.

MANUFACTURERS OF

WOOD'S PATENT

Counter Sinks,

Boring Bits,

Twist Drills,

Machinery and Tools.

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CATALOG R

1903.

## Introductory.

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Since 1874, the year when our tools were first put on the market, our success has been unequalled, and after nearly thirty years of continued effort and experience we can point with great satisfaction to the record made by our tools wherever used.

With this class of goods success surely means excellence of product and the place our tools made for themselves in the front rank as a standard of efficiency and economy is proof conclusive of their superior merits.

Our patent counter sinks and boring bits will be found in nearly all the Furniture Factories in the United States and Canada, and we refer with pleasure to a few users of these tools whose names appear on the last four pages of this catalog.

Believing that the best is the cheapest in the end, we have confined our efforts to the production of the highest grade only; to which the following illustrations and descriptions will bear witness.

Morris Wood & Sons.

WE wish to call your attention to our new patent Combined Boring Bit and Countersink. The cut below, No. 5, represents our adjustable countersink, which will be found superior to any countersink on the market.

This countersink has a drill running through the center the entire length, which can be adjusted as desired; the drill is held in countersink at the shank, which is slotted as the set screw is tightened down on shank to hold countersink in machine; it at the same time presses the slotted shank together, which holds the drill firmly. These countersinks are made of best tool steel, they are all turned perfectly true to standard sizes and the spiral flutes are milled, not twisted. They are tempered the entire length and can be used up to the shank, the small drill can be replaced at small cost, should one break. These countersinks are made with a  $\frac{1}{2}$ -inch shank,  $1\frac{1}{2}$  inches long, or with the Morse taper shanks, length of countersink  $4\frac{1}{2}$  inches, total length of countersink and drill 6 inches.

## COUNTERSINK.



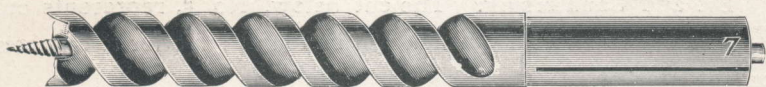
(Patented.)

## PRICE OF COUNTERSINKS CARRIED IN STOCK.

Other sizes made to order upon application.

| Diameter.                |   |                                                                                                 | Price. |
|--------------------------|---|-------------------------------------------------------------------------------------------------|--------|
| $\frac{3}{8}$ -inch..... | } | With $\frac{5}{32}$ or $\frac{3}{16}$ Drills .....                                              | \$1.50 |
| $\frac{7}{16}$ ".....    |   |                                                                                                 |        |
| $\frac{1}{2}$ ".....     | " | $\frac{3}{16}$ , $\frac{7}{32}$ or $\frac{1}{4}$ Drills.....                                    | 1.50   |
| $\frac{9}{16}$ ".....    | " | $\frac{3}{16}$ , $\frac{7}{32}$ , $\frac{1}{4}$ or $\frac{9}{32}$ Drills.....                   | 1.50   |
| $\frac{5}{8}$ ".....     | " | $\frac{3}{16}$ , $\frac{7}{32}$ , $\frac{1}{4}$ , $\frac{9}{32}$ or $\frac{5}{16}$ Drills ..... | 1.75   |
| $\frac{11}{16}$ ".....   | " | $\frac{7}{32}$ , $\frac{1}{4}$ , $\frac{9}{32}$ or $\frac{5}{16}$ Drills.....                   | 1.85   |
| $\frac{3}{4}$ ".....     | " | $\frac{1}{4}$ , $\frac{9}{32}$ , $\frac{5}{16}$ or $\frac{11}{32}$ Drills .....                 | 2.10   |
| $\frac{13}{16}$ ".....   | " | $\frac{9}{32}$ , $\frac{5}{16}$ or $\frac{11}{32}$ Drills.....                                  | 2.25   |
| $\frac{7}{8}$ ".....     | " | $\frac{5}{16}$ , $\frac{11}{32}$ or $\frac{3}{8}$ Drills.....                                   | 2.40   |
| 1 ".....                 | " | $\frac{5}{16}$ , $\frac{11}{32}$ , $\frac{3}{8}$ or $\frac{7}{16}$ Drills.....                  | 2.65   |
| $1\frac{1}{8}$ ".....    | " | $\frac{5}{16}$ , $\frac{11}{32}$ , $\frac{3}{8}$ or $\frac{7}{16}$ Drills.....                  | 3.00   |
| $1\frac{1}{4}$ ".....    | " | $\frac{5}{16}$ , $\frac{11}{32}$ , $\frac{3}{8}$ or $\frac{7}{16}$ Drills.....                  | 3.50   |
| $1\frac{3}{8}$ ".....    | " | $\frac{5}{16}$ , $\frac{11}{32}$ , $\frac{3}{8}$ , $\frac{7}{16}$ or $\frac{1}{2}$ Drills.....  | 4.00   |
| $1\frac{1}{2}$ ".....    | " | $\frac{11}{32}$ , $\frac{3}{8}$ , $\frac{7}{16}$ , $\frac{1}{2}$ or $\frac{9}{16}$ Drills.....  | 4.75   |

## BORING BIT.



(Patented.)

THE above cut represents our new patent Boring Bit, which upon trial will be found superior to any boring bit on the market. In bringing this boring bit before the public, we feel sure that we have filled a long-felt want.

These boring bits are made of the best tool steel, and are tempered the entire length; they are turned true to size and can be used up to the shank, they have a loose center with screw point, which can be taken out and the bit sharpened, when the screw point may be replaced, which makes the bit ready for use. If this screw point breaks off it can be taken out and a new one put in at a very small cost, which makes the bit as good as ever.

Every wood worker can see at once the superior advantages it has over the solid screw point boring bit; the above bit is calculated for boring sideways, and will be found a very useful bit for boring dowell holes.

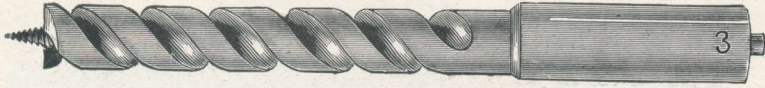
These bits are made  $4\frac{1}{2}$  inches long, shanks are made  $1\frac{1}{2}$  inches long and  $\frac{1}{2}$ -inch in diameter, or with the Morse taper shank.

## PRICE OF BORING BITS CARRIED IN STOCK.

Other sizes made to order upon application.

| Diameter, $\frac{5}{16}$ inch..... | Price, \$1.25 |
|------------------------------------|---------------|
| " $\frac{3}{8}$ "                  | " 1.25        |
| " $\frac{7}{16}$ "                 | " 1.25        |
| " $\frac{1}{2}$ "                  | " 1.25        |
| " $\frac{9}{16}$ "                 | " 1.50        |
| " $\frac{5}{8}$ "                  | " 1.75        |
| " $\frac{11}{16}$ "                | " 1.85        |
| " $\frac{3}{4}$ "                  | " 2.00        |
| " $\frac{13}{16}$ "                | " 2.10        |
| " $\frac{7}{8}$ "                  | " 2.25        |
| " $\frac{15}{16}$ "                | " 2.35        |
| " 1 "                              | " 2.50        |
| " $1\frac{1}{8}$ "                 | " 2.75        |
| " $1\frac{1}{4}$ "                 | " 3.00        |
| " $1\frac{3}{8}$ "                 | " 3.50        |
| " $1\frac{1}{2}$ "                 | " 4.00        |

## END BORING BIT.

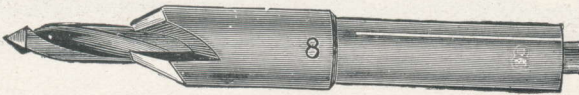


(Patented.)

THE above cut represents our patent Boring Bit for boring endways of timber. This bit is made on the same principle as our boring bit No. 7, described on page 5. It will be found an excellent bit for boring endways, having no lips, which insures a perfect cutting bit for the purpose intended. The shanks are  $1\frac{1}{2}$  inches long and  $\frac{1}{2}$ -inch in diameter, or with the Morse taper shank. The price is the same as bits on page 5.

We furnish with every dozen bits two chucks free of charge to fit the Pryble Boring Machine. (See cut No. 1.)

## TAPER COUNTERSINK.

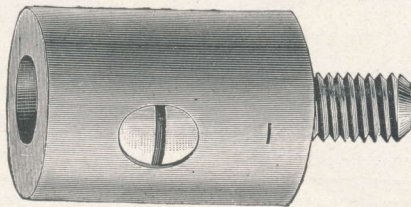


(Patented.)

This Countersink is made to countersink for screwheads. The drill runs the entire length and can be adjusted as desired. The shank is slotted to hold drill, the same as countersink No. 5, described on page 4. Length of countersink 3 inches, total length of countersink and drill  $4\frac{1}{2}$  inches. The shank is made  $1\frac{1}{2}$  inches long and  $\frac{1}{2}$ -inch in diameter, or with the Morse taper shank. Price of Taper Countersinks (carried in stock and other sizes made to order), upon application.

|                                    |                                                                                                                      |        |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------|--------|
| $\frac{1}{2}$ -inch diameter, with | $\frac{3}{32}$ , $\frac{4}{32}$ , $\frac{5}{32}$ , $\frac{6}{32}$ , $\frac{7}{32}$ or $\frac{8}{32}$ inch Drills.... | \$1.50 |
| $\frac{5}{8}$ " " " "              | $\frac{9}{32}$ , $\frac{10}{32}$ , $\frac{11}{32}$ or $\frac{12}{32}$ inch Drills.....                               | 1.65   |

## CHUCK FOR PRYBLE BORING MACHINE.

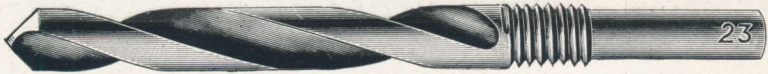


This Chuck has a  $\frac{1}{2}$ -inch hole which enables anyone to use bits with a  $\frac{1}{2}$ -inch shank in the Pryble Boring Machine.

Price, each.....\$1.00

## SCREW SHANK DRILL BIT.

FOR JENKINS' CHAIR SEAT BORING MACHINE.



| Diameter.               | Length.       | Price per Doz. |
|-------------------------|---------------|----------------|
| $\frac{1}{4}$ inch..... | 5 inches..... | \$ 6.00        |
| $\frac{5}{16}$ ".....   | 5 ".....      | 6.60           |
| $\frac{3}{8}$ ".....    | 5 ".....      | 7.20           |
| $\frac{7}{16}$ ".....   | 5 ".....      | 7.80           |
| $\frac{1}{2}$ ".....    | 5 ".....      | 9.00           |
| $\frac{9}{16}$ ".....   | 5 ".....      | 10.20          |
| $\frac{5}{8}$ ".....    | 5 ".....      | 12.00          |

## STRAIGHT SHANK DRILLS.

FOR NO. 5 COUNTERSINK.



| Diameter.                | Length.       | Price. |
|--------------------------|---------------|--------|
| $\frac{5}{32}$ inch..... | 6 inches..... | \$0.35 |
| $\frac{3}{16}$ ".....    | 6 ".....      | .45    |
| $\frac{1}{8}$ ".....     | 6 ".....      | .50    |
| $\frac{1}{4}$ ".....     | 6 ".....      | .60    |
| $\frac{9}{32}$ ".....    | 6 ".....      | .65    |
| $\frac{5}{16}$ ".....    | 6 ".....      | .70    |
| $\frac{11}{32}$ ".....   | 6 ".....      | .73    |
| $\frac{3}{8}$ ".....     | 6 ".....      | .75    |

## STRAIGHT SHANK DRILLS.

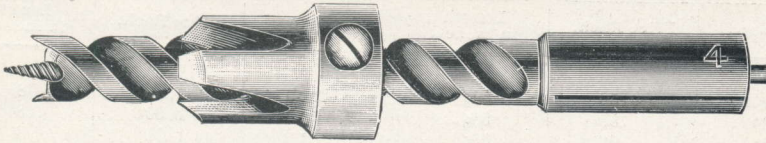
FOR NO. 8 COUNTERSINK.



| Diameter.                | Length.                    | Price. |
|--------------------------|----------------------------|--------|
| $\frac{3}{32}$ inch..... | $4\frac{1}{2}$ inches..... | \$0.10 |
| $\frac{1}{16}$ ".....    | $4\frac{1}{2}$ ".....      | .13    |
| $\frac{5}{32}$ ".....    | $4\frac{1}{2}$ ".....      | .15    |
| $\frac{3}{16}$ ".....    | $4\frac{1}{2}$ ".....      | .20    |
| $\frac{1}{4}$ ".....     | $4\frac{1}{2}$ ".....      | .21    |
| $\frac{7}{32}$ ".....    | $4\frac{1}{2}$ ".....      | .23    |
| $\frac{1}{2}$ ".....     | $4\frac{1}{2}$ ".....      | .26    |
| $\frac{5}{8}$ ".....     | $4\frac{1}{2}$ ".....      | .28    |
| $\frac{3}{4}$ ".....     | $4\frac{1}{2}$ ".....      | .32    |
| $\frac{7}{8}$ ".....     | $4\frac{1}{2}$ ".....      | .37    |
| $\frac{15}{16}$ ".....   | $4\frac{1}{2}$ ".....      | .42    |
| $\frac{15}{8}$ ".....    | $4\frac{1}{2}$ ".....      | .48    |

# TAPER SHELL COUNTERSINK.

FOR BORING BITS.



The above cut represents our patent boring bit with a taper shell countersink. This shell countersink will be found a very useful tool for boring bits, to countersink the edge of holes. It can be adjusted for any depth of hole. Sizes of shell countersinks carried in stock.

| Sizes.                   | Price. |
|--------------------------|--------|
| $\frac{5}{16}$ inch..... | \$0.75 |
| $\frac{3}{8}$ ".....     | .75    |
| $\frac{7}{16}$ ".....    | .75    |
| $\frac{1}{2}$ ".....     | .75    |

Other sizes to order.

# STRAIGHT SHANK DRILLS FOR WOOD

Style No. 29.



These drills can be used to bore picture frames and mouldings.

| Diameter<br>Inches | Price<br>Per Doz. | Price<br>Each | Length<br>Inches | Diameter<br>Inches | Price<br>Per Doz. | Price<br>Each | Length<br>Inches |
|--------------------|-------------------|---------------|------------------|--------------------|-------------------|---------------|------------------|
| $\frac{1}{16}$     | \$1 00            | \$0 09        | 2 $\frac{1}{2}$  | $\frac{3}{8}$      | \$4 00            | \$0 35        | 5                |
| $\frac{3}{32}$     | 1 20              | 11            | 2 $\frac{3}{4}$  | $\frac{1}{2}$      | 4 50              | 40            | 5 $\frac{1}{4}$  |
| $\frac{1}{8}$      | 1 45              | 13            | 3                | $\frac{5}{16}$     | 4 50              | 40            | 5 $\frac{1}{2}$  |
| $\frac{5}{32}$     | 1 75              | 18            | 3 $\frac{1}{4}$  | $\frac{3}{16}$     | 5 00              | 45            | 5 $\frac{3}{4}$  |
| $\frac{3}{16}$     | 2 00              | 20            | 3 $\frac{1}{2}$  | $\frac{1}{2}$      | 5 00              | 45            | 6                |
| $\frac{7}{32}$     | 2 50              | 22            | 3 $\frac{3}{4}$  | $\frac{5}{16}$     | 5 50              | 50            | 6                |
| $\frac{1}{4}$      | 3 00              | 25            | 4                | $\frac{3}{8}$      | 5 50              | 50            | 6                |
| $\frac{9}{32}$     | 3 50              | 30            | 4 $\frac{1}{4}$  | $\frac{1}{2}$      | 6 00              | 55            | 6                |
| $\frac{5}{16}$     | 3 50              | 30            | 4 $\frac{1}{2}$  | $\frac{3}{8}$      | 6 00              | 55            | 6                |

## MACHINE BITS FOR WOOD.



| Diameter.          | Price Each. | Length<br>in inches. | Diameter.            | Price Each. | Length<br>in inches. |
|--------------------|-------------|----------------------|----------------------|-------------|----------------------|
| $\frac{1}{8}$ inch | \$0.50      | $5\frac{1}{8}$       | $\frac{9}{32}$ inch. | \$1.50      | 8                    |
| $\frac{5}{16}$ "   | .50         | $5\frac{3}{8}$       | $\frac{7}{8}$ "      | 1.60        | 8                    |
| $\frac{3}{8}$ "    | .60         | $5\frac{5}{8}$       | $\frac{21}{32}$ "    | 1.70        | 8                    |
| $\frac{1}{2}$ "    | .60         | $5\frac{7}{8}$       | $\frac{11}{16}$ "    | 1.80        | 8                    |
| $\frac{3}{4}$ "    | .70         | $6\frac{1}{8}$       | $\frac{23}{32}$ "    | 1.90        | 8                    |
| $\frac{7}{8}$ "    | .75         | $6\frac{1}{4}$       | $\frac{3}{4}$ "      | 2.00        | 8                    |
| $\frac{15}{16}$ "  | .80         | $6\frac{3}{8}$       | $\frac{25}{32}$ "    | 2.20        | 8                    |
| $\frac{1}{16}$ "   | .85         | $6\frac{1}{2}$       | $\frac{13}{16}$ "    | 2.40        | 8                    |
| $\frac{3}{32}$ "   | .90         | $6\frac{3}{4}$       | $\frac{27}{32}$ "    | 2.50        | 8                    |
| $\frac{1}{8}$ "    | .95         | 7                    | $\frac{7}{8}$ "      | 2.60        | 8                    |
| $\frac{3}{16}$ "   | 1.00        | $7\frac{1}{4}$       | $\frac{29}{32}$ "    | 2.80        | 8                    |
| $\frac{1}{4}$ "    | 1.10        | $7\frac{1}{2}$       | $\frac{15}{16}$ "    | 3.00        | 8                    |
| $\frac{1}{2}$ "    | 1.20        | $7\frac{3}{4}$       | $\frac{31}{32}$ "    | 3.20        | 8                    |
| $\frac{3}{4}$ "    | 1.30        | 8                    | 1                    | 3.40        | 8                    |
| $\frac{15}{16}$ "  | 1.40        | 8                    |                      |             |                      |

The above Drills have Shanks 2 inches long and  $\frac{1}{2}$ -inch in diameter.

## MACHINE BITS FOR WOOD

WITH

MORSE TAPER SHANKS.



| Diameter.           | Price Each. | Length<br>in inches. | Diameter.             | Price Each. | Length<br>in inches. |
|---------------------|-------------|----------------------|-----------------------|-------------|----------------------|
| $\frac{1}{8}$ inch. | \$0.50      | $4\frac{9}{16}$      | $\frac{15}{32}$ inch. | \$1.10      | $7\frac{1}{2}$       |
| $\frac{5}{16}$ "    | .50         | $4\frac{13}{16}$     | $\frac{1}{2}$ "       | 1.20        | $7\frac{3}{4}$       |
| $\frac{3}{8}$ "     | .60         | $5\frac{1}{16}$      | $\frac{9}{16}$ "      | 1.30        | 8                    |
| $\frac{1}{2}$ "     | .60         | $5\frac{5}{16}$      | $\frac{5}{8}$ "       | 1.40        | 8                    |
| $\frac{3}{4}$ "     | .70         | $6\frac{1}{8}$       | $\frac{11}{8}$ "      | 1.50        | 8                    |
| $\frac{7}{8}$ "     | .75         | $6\frac{1}{4}$       | $\frac{3}{2}$ "       | 1.60        | 8                    |
| $\frac{15}{16}$ "   | .80         | $6\frac{3}{8}$       | $\frac{13}{8}$ "      | 1.70        | 8                    |
| $\frac{1}{16}$ "    | .85         | $6\frac{1}{2}$       | $\frac{27}{8}$ "      | 1.80        | 8                    |
| $\frac{3}{32}$ "    | .90         | $6\frac{3}{4}$       | $\frac{11}{4}$ "      | 1.90        | 8                    |
| $\frac{1}{8}$ "     | .95         | 7                    | $\frac{23}{4}$ "      | 2.00        | 8                    |
| $\frac{3}{16}$ "    | 1.00        | $7\frac{1}{4}$       |                       |             |                      |

**MACHINE BITS FOR WOOD.**

WITH WHITNEY TAPER SHANKS.

Short lengths.

**Style No. 19**

| Diam.<br>Inches | Price<br>Each | Length<br>Inches | Diam.<br>Inches | Price<br>Each | Length<br>Inches | Diam.<br>Inches | Price<br>Each | Length<br>Inches |
|-----------------|---------------|------------------|-----------------|---------------|------------------|-----------------|---------------|------------------|
| 1/8             | \$0 50        | 5                | 7/16            | \$0 90        | 5                | 3/4             | \$1 50        | 5                |
| 5/32            | 50            | 5                | 15/32           | 95            | 5                | 25/32           | 1 55          | 5                |
| 3/16            | 50            | 5                | 1/2             | 1 00          | 5                | 13/16           | 1 60          | 5                |
| 7/32            | 50            | 5                | 17/32           | 1 10          | 5                | 27/32           | 1 65          | 5                |
| 1/4             | 60            | 5                | 9/16            | 1 20          | 5                | 7/8             | 1 70          | 5                |
| 5/16            | 65            | 5                | 19/32           | 1 25          | 5                | 29/32           | 1 75          | 5                |
| 3/8             | 70            | 5                | 5/8             | 1 30          | 5                | 15/16           | 1 80          | 5                |
| 11/32           | 75            | 5                | 21/32           | 1 35          | 5                | 31/32           | 1 85          | 5                |
| 5/8             | 80            | 5                | 11/16           | 1 40          | 5                | 1               | 1 90          | 5                |
| 13/32           | 85            | 5                | 23/32           | 1 45          | 5                |                 |               |                  |

**MACHINE BITS FOR WOOD.**

WITH SHANKS, 1/2 INCH DIAMETER.

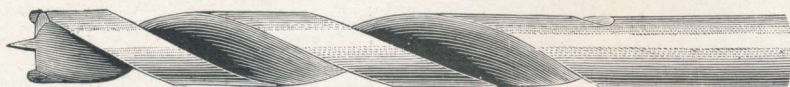
Short lengths.

**Style No. 21.**

| Diam.<br>Inches | Price<br>Each | Length<br>Inches | Diam.<br>Inches | Price<br>Each | Length<br>Inches | Diam.<br>Inches | Price<br>Each | Length<br>Inches |
|-----------------|---------------|------------------|-----------------|---------------|------------------|-----------------|---------------|------------------|
| 1/8             | \$0 50        | 5                | 7/16            | \$0 90        | 5                | 3/4             | \$1 50        | 5                |
| 5/32            | 50            | 5                | 15/32           | 95            | 5                | 25/32           | 1 55          | 5                |
| 3/16            | 50            | 5                | 1/2             | 1 00          | 5                | 13/16           | 1 60          | 5                |
| 7/32            | 50            | 5                | 17/32           | 1 10          | 5                | 27/32           | 1 65          | 5                |
| 1/4             | 60            | 5                | 9/16            | 1 20          | 3                | 7/8             | 1 70          | 5                |
| 5/16            | 65            | 5                | 19/32           | 1 25          | 5                | 29/32           | 1 75          | 5                |
| 3/8             | 70            | 5                | 5/8             | 1 30          | 5                | 15/16           | 1 80          | 5                |
| 11/32           | 75            | 5                | 21/32           | 1 35          | 5                | 31/32           | 1 85          | 5                |
| 5/8             | 80            | 5                | 11/16           | 1 40          | 5                | 1               | 1 90          | 5                |
| 13/32           | 85            | 5                | 23/32           | 1 45          | 5                |                 |               |                  |

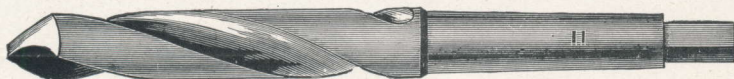
In ordering always give style number.

# STRAIGHT SHANK MACHINE BITS. FOR WOOD.



| Diameter.           | Price Each. | Length<br>in Inches. | Diameter.             | Price Each. | Length<br>in Inches. |
|---------------------|-------------|----------------------|-----------------------|-------------|----------------------|
| $\frac{1}{8}$ inch. | \$0.20      | 3                    | $\frac{15}{32}$ inch. | \$0.80      | $5\frac{3}{4}$       |
| $\frac{5}{16}$ "    | .25         | $3\frac{1}{4}$       | $\frac{1}{2}$ "       | .85         | 6                    |
| $\frac{3}{8}$ "     | .30         | $3\frac{1}{2}$       | $\frac{17}{32}$ "     | .95         | $6\frac{1}{2}$       |
| $\frac{7}{16}$ "    | .35         | $3\frac{3}{4}$       | $\frac{9}{16}$ "      | 1.00        | $6\frac{1}{4}$       |
| $\frac{1}{4}$ "     | .40         | 4                    | $\frac{11}{16}$ "     | 1.15        | $6\frac{1}{2}$       |
| $\frac{9}{16}$ "    | .45         | $4\frac{1}{4}$       | $\frac{3}{4}$ "       | 1.35        | 7                    |
| $\frac{5}{16}$ "    | .50         | $4\frac{1}{2}$       | $\frac{13}{16}$ "     | 1.65        | $7\frac{1}{2}$       |
| $\frac{11}{16}$ "   | .55         | $4\frac{3}{4}$       | $\frac{7}{8}$ "       | 1.95        | 8                    |
| $\frac{3}{4}$ "     | .65         | 5                    | $\frac{15}{16}$ "     | 2.30        | 8                    |
| $\frac{13}{16}$ "   | .70         | $5\frac{1}{4}$       | 1 "                   | 2.65        | 8                    |
| $\frac{7}{8}$ "     | .75         | $5\frac{1}{2}$       |                       | 3.00        | 8                    |

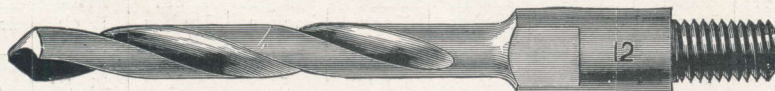
## DRILL BIT FOR WOOD.



This bit has taper shank generally used by chair factories. Made right or left hand.

| Diameter.           | Length.                | Price. |
|---------------------|------------------------|--------|
| $\frac{1}{4}$ inch. | $4\frac{1}{2}$ inches. | \$0.50 |
| $\frac{5}{16}$ "    | $4\frac{1}{2}$ "       | .60    |
| $\frac{3}{8}$ "     | $4\frac{1}{2}$ "       | .65    |
| $\frac{7}{16}$ "    | $4\frac{1}{2}$ "       | .70    |
| $\frac{1}{2}$ "     | $4\frac{1}{2}$ "       | .75    |

## SCREW SHANK DRILL BIT. FOR PRYBLE BORING MACHINE.

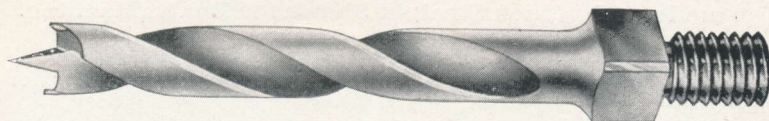


These Drill Bits are milled suitable for boring wood and are superior to the twist drill.

| Diameter.           | Length.                | Price per Doz. |
|---------------------|------------------------|----------------|
| $\frac{1}{4}$ inch. | $4\frac{1}{2}$ inches. | \$ 6.00        |
| $\frac{5}{16}$ "    | $4\frac{1}{2}$ "       | 6.60           |
| $\frac{3}{8}$ "     | $4\frac{1}{2}$ "       | 7.20           |
| $\frac{7}{16}$ "    | $4\frac{1}{2}$ "       | 7.80           |
| $\frac{1}{2}$ "     | $4\frac{1}{2}$ "       | 9.00           |
| $\frac{9}{16}$ "    | $4\frac{1}{2}$ "       | 10.20          |
| $\frac{5}{8}$ "     | $4\frac{1}{2}$ "       | 12.00          |

## SCREW SHANK BRAD-POINT DRILL FOR NASH MACHINE

Style No. 14.



Also made to fit Clement, Pryble or our Standard No. 1 Machine.  
Right or Left Hand.

Sizes Carried in Stock.      Special Lengths on Application.

| Diameter       | Length         | Price Each |
|----------------|----------------|------------|
| $\frac{1}{4}$  | $4\frac{1}{2}$ | .65        |
| $\frac{5}{16}$ | $4\frac{1}{2}$ | .65        |
| $\frac{3}{8}$  | $4\frac{1}{2}$ | .70        |
| $\frac{7}{16}$ | $4\frac{1}{2}$ | .75        |
| $\frac{1}{2}$  | $4\frac{1}{2}$ | .85        |
| $\frac{9}{16}$ | $4\frac{1}{2}$ | .95        |
| $\frac{5}{8}$  | $4\frac{1}{2}$ | 1.10       |
| $1\frac{1}{8}$ | $4\frac{1}{2}$ | 1.25       |
| $\frac{3}{4}$  | $4\frac{1}{2}$ | 1.40       |
| $1\frac{3}{8}$ | $4\frac{1}{2}$ | 1.60       |
| $\frac{7}{8}$  | $4\frac{1}{2}$ | 1.75       |
| $1\frac{5}{8}$ | $4\frac{1}{2}$ | 1.90       |
| 1              | $4\frac{1}{2}$ | 2.15       |

## SCREW SHANK DOWELL BITS.

WILL FIT PRYBLE, CLEMENT OR OUR STANDARD NO 1  
MACHINE.

Style No. 16.



Standard sizes of this bit have 2½ inch twist, Jennings head, and are 4 inches over all.

Sizes Carried in Stock.

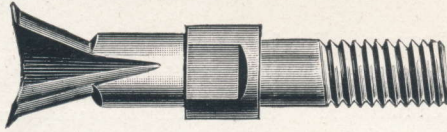
|                 |        |        |        |        |        |        |        |
|-----------------|--------|--------|--------|--------|--------|--------|--------|
| Sizes in 16ths, | 4      | 5      | 6      | 7      | 8      | 9      | 10     |
| Price per Dozen | \$5.40 | \$5.80 | \$6.20 | \$6.80 | \$7.20 | \$7.60 | \$8.00 |
| Discount, ..... |        |        |        |        |        |        |        |

# SCREW SHANK DOVETAIL CUTTERS.

FOR DODD'S MACHINE.

Also made with  $\frac{1}{2}$  inch Straight Shank for Boults Machine.

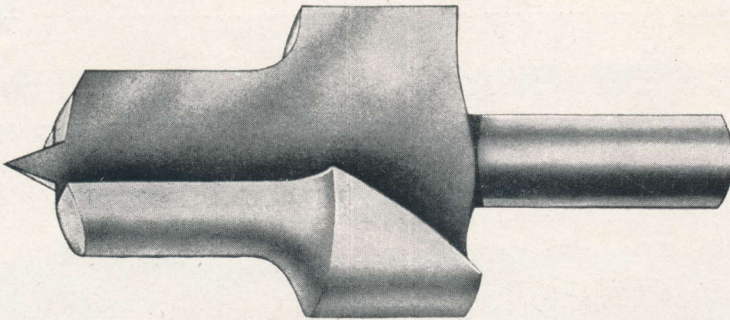
Style No. 30.



Price per dozen.....\$7.20

# HAND HOLE ROUTER BIT.

Style No. 24.



These Router Bits are used to bore and finish the hand holes in beer and pop bottle boxes at one operation.

Large Diameter

$1\frac{3}{4}$

Small Diameter

$\frac{7}{8}$ , 1, or  $1\frac{1}{8}$

Price Each

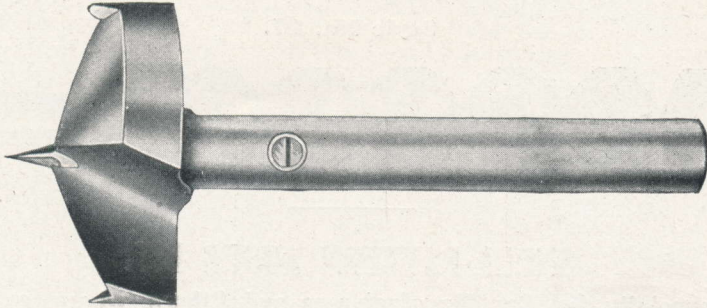
\$3.75

Other Sizes on Application.

In Ordering Always Give Style Number.

**BRAD-POINT BORING BIT.**

Style No. 50.

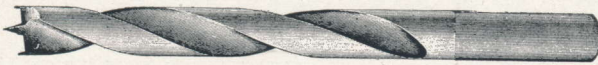


Where it is desired to bore a smooth hole through several pieces of stock at once, this bit will be found to do the work properly. Point is removable and can be easily replaced when broken. Standard length 5 inches over all. Shanks  $\frac{1}{2}$ x4 long.

| Size           | Price  | Size           | Price  | Size           | Price  |
|----------------|--------|----------------|--------|----------------|--------|
| $\frac{5}{8}$  | \$1 45 | $1\frac{1}{4}$ | \$2 45 | $2\frac{3}{8}$ | \$4 50 |
| $\frac{3}{4}$  | 1 65   | $1\frac{1}{2}$ | 2 65   | $2\frac{1}{2}$ | 4 80   |
| $\frac{7}{8}$  | 1 85   | $1\frac{3}{4}$ | 3 00   | $2\frac{5}{8}$ | 5 10   |
| 1              | 2 05   | 2              | 3 60   | $2\frac{3}{4}$ | 5 40   |
| $1\frac{1}{8}$ | 2 25   | $2\frac{1}{4}$ | 4 20   | 3              | 6 00   |

**TUNING PIN DRILLS.**

Style No. 25.



These drills are used by all the leading piano manufacturers in the United States, for boring the wrest plank to receive the tuning pins. We have made a specialty of these drills and make them accurate to fit any tuning pin on the market. In ordering send sample pin.

| Size           | Price per dozen | Length   |
|----------------|-----------------|----------|
| $\frac{1}{4}$  | \$4 80          | 4 inches |
| $\frac{3}{16}$ | 5 40            | 4 "      |
| $\frac{1}{2}$  | 5 40            | 4 "      |

Other Sizes on Application.

Always give style number when ordering.

**JENNINGS PATTERN AUGER BIT.**

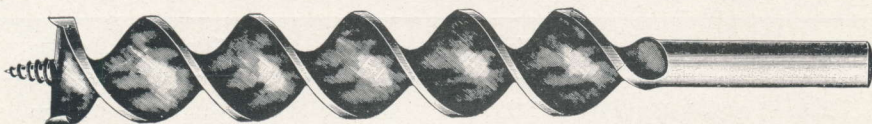
For Smooth Boring in any kind of Stock.

Style No. 17.

**SNELL PATTERN AUGER BIT.**

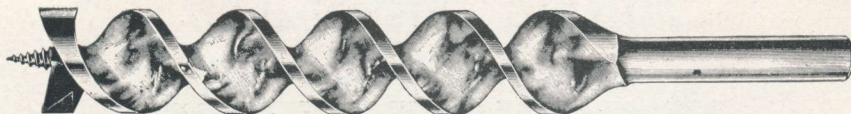
Made especially for Car Manufacturers and Others where extra fast heavy boring is required.

Style No. 26.

**HARDESTY PATTERN AUGER BIT.**

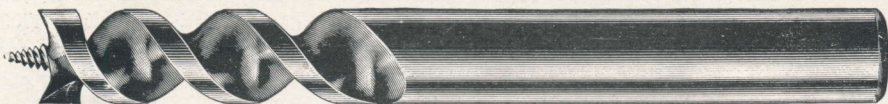
Will not tear the stock in passing through.

Style No. 27.

**HARDESTY PATTERN FELLOE BIT.**

Used extensively by Manufacturers of Vehicle Wheels.

Style No. 28.



Will not split the stock. Standard sizes have 2 inch twist and 3 inch shank.

For list price on any of the above see page 18.

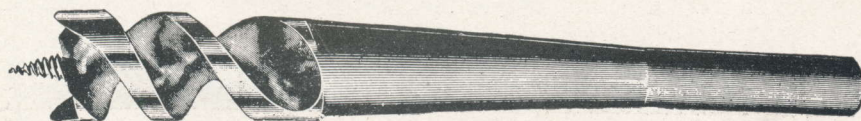
Always give style number when ordering.

## PRICE LIST SOLID SCREW POINT AUGER BITS.

| Size. | Twist 2 to 6<br>inches long. |       | Twist 6 to 9<br>inches long. |       | Twist 9 to 12<br>inches long. |       | Twist 12 to 15<br>inches long. |       |
|-------|------------------------------|-------|------------------------------|-------|-------------------------------|-------|--------------------------------|-------|
|       | Dozen.                       | Each. | Dozen.                       | Each. | Dozen.                        | Each. | Dozen.                         | Each. |
| 4-16  | \$6 00                       | \$ 55 | \$6 60                       | \$ 60 | \$7 20                        | \$ 65 | \$7 80                         | \$ 70 |
| 5-16  | 6 50                         | 60    | 7 15                         | 65    | 7 80                          | 75    | 8 50                           | 80    |
| 6-16  | 7 00                         | 65    | 7 70                         | 75    | 8 40                          | 80    | 9 10                           | 85    |
| 7-16  | 8 25                         | 75    | 9 10                         | 85    | 9 90                          | 90    | 10 70                          | 1 00  |
| 8-16  | 9 50                         | 85    | 10 50                        | 95    | 11 40                         | 1 05  | 12 40                          | 1 10  |
| 9-16  | 10 50                        | 95    | 11 50                        | 1 05  | 12 60                         | 1 15  | 13 70                          | 1 25  |
| 10-16 | 11 50                        | 1 05  | 12 65                        | 1 15  | 13 80                         | 1 25  | 15 00                          | 1 35  |
| 11-16 | 12 50                        | 1 15  | 13 75                        | 1 25  | 15 00                         | 1 35  | 16 25                          | 1 50  |
| 12-16 | 14 00                        | 1 25  | 15 40                        | 1 40  | 16 80                         | 1 50  | 18 20                          | 1 65  |
| 13-16 | 15 50                        | 1 40  | 17 00                        | 1 55  | 18 60                         | 1 65  | 20 20                          | 1 80  |
| 14-16 | 16 75                        | 1 50  | 18 50                        | 1 65  | 20 10                         | 1 80  | 21 80                          | 1 95  |
| 15-16 | 18 00                        | 1 60  | 19 80                        | 1 75  | 21 60                         | 1 95  | 23 40                          | 2 10  |
| 16-16 | 19 50                        | 1 70  | 21 50                        | 1 90  | 23 40                         | 2 10  | 25 40                          | 2 20  |
| 17-16 | 21 00                        | 1 85  | 23 10                        | 2 05  | 25 20                         | 2 25  | 27 30                          | 2 40  |
| 18-16 | 22 50                        | 2 00  | 24 75                        | 2 20  | 27 00                         | 2 35  | 29 25                          | 2 60  |
| 19-16 | 24 00                        | 2 10  | 26 40                        | 2 30  | 28 80                         | 2 50  | 31 20                          | 2 75  |
| 20-16 | 25 50                        | 2 25  | 28 00                        | 2 50  | 30 60                         | 2 70  | 33 20                          | 2 95  |
| 21-16 | 27 00                        | 2 35  | 29 70                        | 2 60  | 32 40                         | 2 85  | 35 20                          | 3 05  |
| 22-16 | 28 50                        | 2 50  | 31 40                        | 2 75  | 34 20                         | 3 00  | 37 00                          | 3 25  |
| 23-16 | 30 00                        | 2 60  | 33 00                        | 2 85  | 36 00                         | 3 15  | 39 00                          | 3 35  |
| 24-16 | 31 50                        | 2 75  | 34 70                        | 3 00  | 37 80                         | 3 30  | 41 00                          | 3 60  |
| 25-16 | 33 00                        | 2 85  | 36 30                        | 3 15  | 39 60                         | 3 40  | 43 00                          | 3 70  |
| 26-16 | 34 50                        | 3 00  | 38 00                        | 3 30  | 41 40                         | 3 60  | 45 00                          | 3 90  |
| 27-16 | 36 00                        | 3 10  | 39 60                        | 3 40  | 43 20                         | 3 75  | 46 80                          | 4 05  |
| 28-16 | 37 50                        | 3 25  | 41 25                        | 3 55  | 45 00                         | 3 90  | 48 75                          | 4 25  |
| 29-16 | 39 00                        | 3 35  | 43 00                        | 3 70  | 46 80                         | 4 05  | 50 70                          | 4 40  |
| 30-16 | 40 50                        | 3 50  | 44 50                        | 3 85  | 48 60                         | 4 20  | 52 70                          | 4 55  |
| 31-16 | 42 00                        | 3 60  | 46 25                        | 4 00  | 50 40                         | 4 35  | 54 60                          | 4 70  |
| 32-16 | 43 50                        | 3 75  | 48 00                        | 4 15  | 52 20                         | 4 50  | 56 60                          | 4 90  |
| 33-16 | 45 00                        | 3 85  | 49 75                        | 4 35  | 54 00                         | 4 65  | 58 60                          | 5 05  |
| 34-16 | 46 50                        | 4 00  | 51 50                        | 4 50  | 55 80                         | 4 80  | 60 60                          | 5 25  |
| 35-16 | 48 00                        | 4 10  | 53 25                        | 4 65  | 57 60                         | 5 00  | 62 60                          | 5 50  |
| 36-16 | 49 50                        | 4 25  | 55 00                        | 4 80  | 59 40                         | 5 20  | 64 60                          | 5 75  |

## RELISHING BIT.

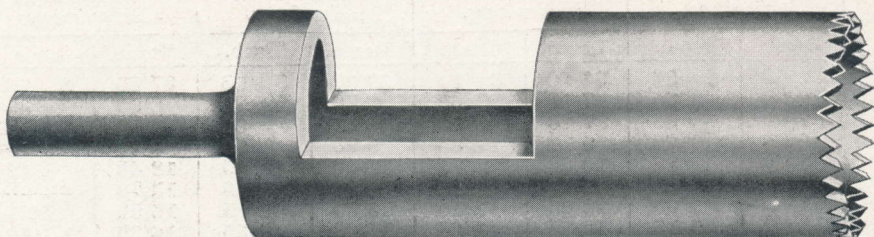
Style No 21.



Standard sizes have  $1\frac{3}{4} \times \frac{3}{8}$  in. shanks. 5 inches over all. Jennings head. Special sizes and left hand ones made promptly to order, on which name complete dimensions. See above List for prices.

Always give style number when ordering.

## BARREL SAW.



These saws are usually used to bore the corners from chairs, tables, etc., but may also be used to bore where a bit with center can not be used to advantage.

Standard sizes have shanks  $\frac{1}{2}$  inch diameter, by 2 inches long

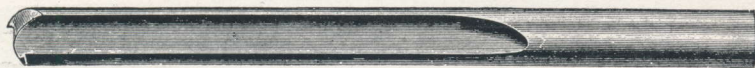
Made either with or without opening.

| Diameter              | Length of Barrel | Price Each |
|-----------------------|------------------|------------|
| 1 .....               | 6 inches .....   | \$4 25     |
| 1 $\frac{1}{8}$ ..... | 6 " .....        | 4 75       |
| 1 $\frac{1}{4}$ ..... | 6 " .....        | 5 25       |
| 1 $\frac{3}{8}$ ..... | 6 " .....        | 5 75       |
| 1 $\frac{1}{2}$ ..... | 6 " .....        | 6 50       |
| 1 $\frac{5}{8}$ ..... | 6 " .....        | 7 25       |
| 1 $\frac{3}{4}$ ..... | 6 " .....        | 8 00       |
| 1 $\frac{7}{8}$ ..... | 6 " .....        | 8 75       |
| 2 .....               | 6 " .....        | 9 50       |

## MOULDING ROUTER BITS.

For Moulding and Picture Frame Factories.

Style No. 45.



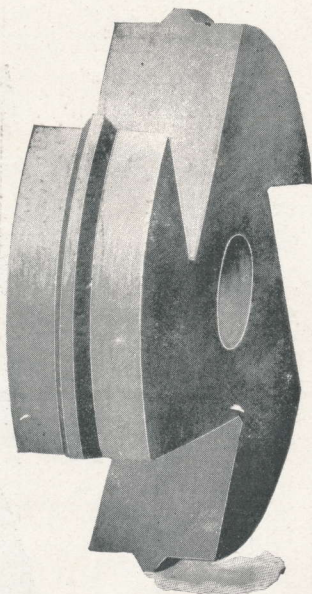
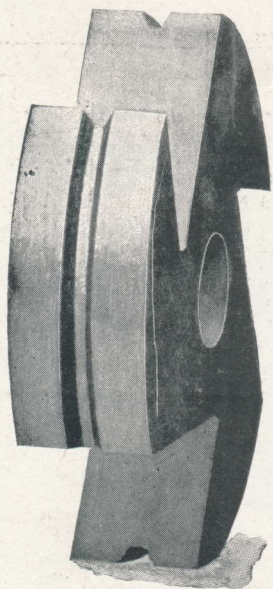
We also make these bits with taper points if desired.

Shanks  $\frac{1}{2}$  inch diameter or less.

Price  $\frac{1}{2}$  inch diameter or less..... \$8.00 per doz.

Always give style number when ordering.

## SOLID STEEL GLUE JOINT CUTTERS.



These cutters are relieved by our patent machine and will retain the same form until entirely worn out. They are of uniform hard temper for grinding and are superior to any glue joint cutter on the market.

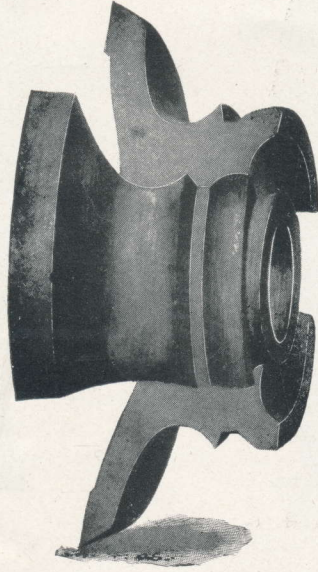
In ordering give size of spindle and number of teeth desired.

| Diameter.      |                 | Thickness.      |                 |
|----------------|-----------------|-----------------|-----------------|
| 5 inches       | 1 $\frac{1}{8}$ | 1 $\frac{3}{8}$ | 1 $\frac{5}{8}$ |
| Price per pair | \$20.           | \$22.           | \$24.           |

Other sizes on application.

Above list subject to discount.

## SOLID STEEL MOULDING CUTTERS.



These cutters are relieved in the same manner as our glue joint cutters described on page 13.

They are made of a fine grade of tool steel adapted to this class of tools, and are tempered to file or grind.

They are to be sharpened on the face, and will retain the same mould until entirely worn out.

In ordering give size of spindle, number of teeth desired, sample of mould, and state diameter and thickness.

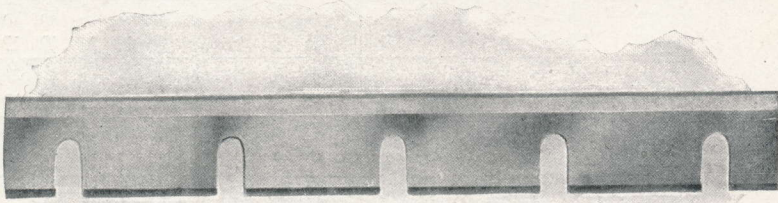
For prices see opposite page.

## PRICE LIST OF SOLID STEEL CUTTERS.

FOR EDGE MOULDING, SHAPING, JOINTING, GROOVING AND MATCHING.

| THICK-<br>NESS<br>DIAM-<br>ETER | 1/2    | 3/8    | 1/2    | 3/4    | 7/8    | 1      | 1 1/8  | 1 1/4  | 1 3/8  | 1 1/2  | 1 5/8  | 1 3/4  | 1 7/8  | 2      | 2 1/8  | 2 1/4  | 2 3/8  | 2 1/2  | 2 5/8  | 2 3/4  | 2 7/8  | 3      |
|---------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1 1/4.....                      | \$2 20 | \$2 20 | \$2 20 | \$3 05 | \$3 05 | \$2 75 | \$3 05 | \$3 30 | \$3 60 | \$3 85 | \$4 15 | \$4 40 | \$4 70 | \$4 95 | \$5 25 | \$5 50 | \$5 80 | \$6 05 | \$6 35 | \$6 60 | \$6 90 | \$7 15 |
| 1 7/8.....                      | 2 20   | 2 20   | 2 50   | 3 05   | 3 30   | 3 05   | 3 30   | 3 60   | 3 85   | 4 15   | 4 40   | 4 70   | 4 95   | 5 25   | 5 50   | 5 80   | 6 05   | 6 35   | 6 60   | 6 90   | 7 15   | 7 45   |
| 2 .....                         | 2 20   | 2 50   | 2 75   | 3 05   | 3 30   | 3 30   | 3 60   | 3 85   | 4 15   | 4 40   | 4 70   | 4 95   | 5 25   | 5 50   | 5 80   | 6 05   | 6 35   | 6 60   | 6 90   | 7 15   | 7 45   | 7 70   |
| 2 1/4.....                      | 2 75   | 3 05   | 3 30   | 3 60   | 3 85   | 4 15   | 4 40   | 4 70   | 4 95   | 5 25   | 5 50   | 5 80   | 6 05   | 6 35   | 6 60   | 6 90   | 7 15   | 7 45   | 7 70   | 8 00   | 8 25   | 8 50   |
| 2 1/2.....                      | 3 30   | 3 60   | 3 85   | 4 15   | 4 40   | 4 95   | 5 25   | 5 50   | 5 80   | 6 05   | 6 35   | 6 60   | 6 90   | 7 15   | 7 45   | 7 70   | 8 00   | 8 25   | 8 50   | 8 80   | 9 10   | 9 35   |
| 2 3/4.....                      | 3 85   | 4 15   | 4 40   | 4 70   | 4 95   | 5 25   | 5 50   | 5 80   | 6 05   | 6 35   | 6 60   | 6 90   | 7 15   | 7 45   | 7 70   | 8 00   | 8 25   | 8 50   | 8 80   | 9 10   | 9 35   | 9 60   |
| 3 ....                          | 4 40   | 4 70   | 4 95   | 5 25   | 5 50   | 5 80   | 6 05   | 6 35   | 6 60   | 6 90   | 7 15   | 7 45   | 7 70   | 8 00   | 8 25   | 8 50   | 8 80   | 9 10   | 9 35   | 9 60   | 9 90   | 10 20  |
| 3 1/4.....                      | 4 95   | 5 25   | 5 50   | 5 80   | 6 05   | 6 35   | 6 60   | 6 90   | 7 15   | 7 45   | 7 70   | 8 00   | 8 25   | 8 50   | 8 80   | 9 10   | 9 35   | 9 60   | 9 90   | 10 20  | 10 45  | 10 75  |
| 3 1/2.....                      | 5 50   | 5 80   | 6 05   | 6 35   | 6 60   | 6 90   | 7 15   | 7 45   | 7 70   | 8 00   | 8 25   | 8 50   | 8 80   | 9 10   | 9 35   | 9 60   | 9 90   | 10 20  | 10 45  | 10 75  | 11 00  | 11 30  |
| 3 3/4.....                      | 6 05   | 6 35   | 6 60   | 6 90   | 7 15   | 7 45   | 7 70   | 8 00   | 8 25   | 8 50   | 8 80   | 9 10   | 9 35   | 9 60   | 9 90   | 10 20  | 10 45  | 10 75  | 11 00  | 11 30  | 11 55  | 12 10  |
| 4 ....                          | 6 60   | 6 90   | 7 15   | 7 45   | 7 70   | 8 00   | 8 25   | 8 50   | 8 80   | 9 10   | 9 35   | 9 60   | 9 90   | 10 20  | 10 45  | 10 75  | 11 00  | 11 30  | 11 55  | 12 10  | 12 40  | 12 65  |
| 4 1/4.....                      | 7 80   | 8 10   | 8 40   | 8 70   | 9 00   | 9 30   | 9 60   | 9 90   | 10 20  | 10 50  | 10 80  | 11 10  | 11 40  | 11 70  | 12 00  | 12 30  | 12 60  | 12 90  | 13 20  | 13 50  | 13 80  | 14 10  |
| 4 1/2.....                      | 8 40   | 8 70   | 9 00   | 9 30   | 9 60   | 9 90   | 10 20  | 10 50  | 10 80  | 11 10  | 11 40  | 11 70  | 12 00  | 12 30  | 12 60  | 12 90  | 13 20  | 13 50  | 13 80  | 14 10  | 14 40  | 14 70  |
| 4 3/4.....                      | 9 00   | 9 30   | 9 60   | 9 90   | 10 20  | 10 50  | 10 80  | 11 10  | 11 40  | 11 70  | 12 00  | 12 30  | 12 60  | 12 90  | 13 20  | 13 50  | 13 80  | 14 10  | 14 40  | 14 70  | 15 00  | 15 30  |
| 5 ....                          | 9 60   | 9 90   | 10 20  | 10 50  | 10 80  | 11 10  | 11 40  | 11 70  | 12 00  | 12 30  | 12 60  | 12 90  | 13 20  | 13 50  | 13 80  | 14 10  | 14 40  | 14 70  | 15 00  | 15 30  | 15 60  | 15 90  |
| 5 1/4.....                      | 10 20  | 10 50  | 10 80  | 11 10  | 11 40  | 11 70  | 12 00  | 12 30  | 12 60  | 12 90  | 13 20  | 13 50  | 13 80  | 14 10  | 14 40  | 14 70  | 15 00  | 15 30  | 15 60  | 15 90  | 16 20  | 16 50  |
| 5 1/2.....                      | 10 80  | 11 10  | 11 40  | 11 70  | 12 00  | 12 30  | 12 60  | 12 90  | 13 20  | 13 50  | 13 80  | 14 10  | 14 40  | 14 70  | 15 00  | 15 30  | 15 60  | 15 90  | 16 20  | 16 50  | 16 80  | 17 10  |

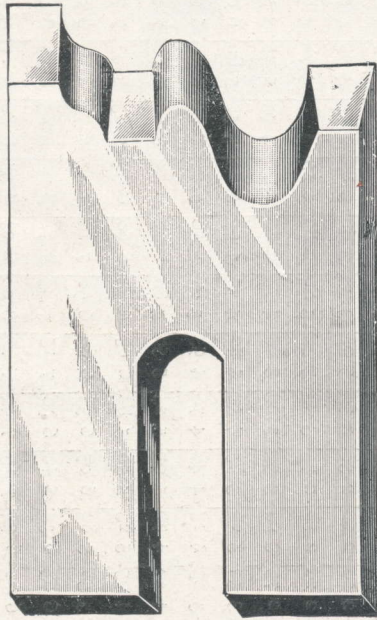
## PLANER KNIVES.



We guarantee our knives the equal of any on the market. In ordering send paper pattern with dimensions.

Knives 6 inches to 31 inches long, 4 inches or less in width, and  $\frac{3}{8}$  inches or less in thickness. 13 cents per inch of length

## MOULDING AND SHAPER KNIVES.



In ordering always send pattern and state thickness of knives wanted.

Net price per inch measuring across the face.

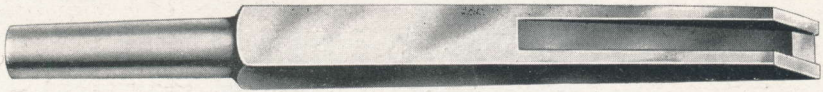
$\frac{1}{4}$  inch 30 cents.

$\frac{5}{16}$  inch 35 cents.

$\frac{3}{8}$  inch 40 cents.

## STANDARD SOLID MORTISING CHISEL.

Style No. 36.



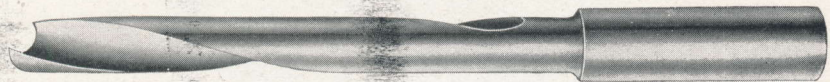
Always send sample shank when ordering.

Special shanks special prices.

$\frac{1}{4}$  to  $\frac{5}{8}$  diameter Standard shank. .... \$1 00 each.

## MORTISE CLEANING BIT.

Style No. 37.



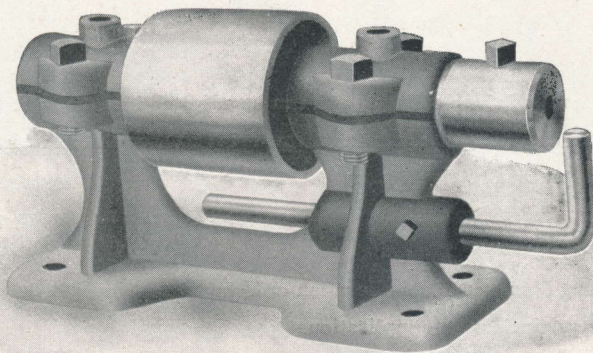
For cleaning chips out of mortise after chisel has been used. Standard Shanks

$\frac{1}{2} \times 1\frac{1}{2}$ .

$\frac{1}{4}$  to  $\frac{5}{8}$  diameter Standard stock sizes. .... .75 each

## BENCH BORING MACHINE.

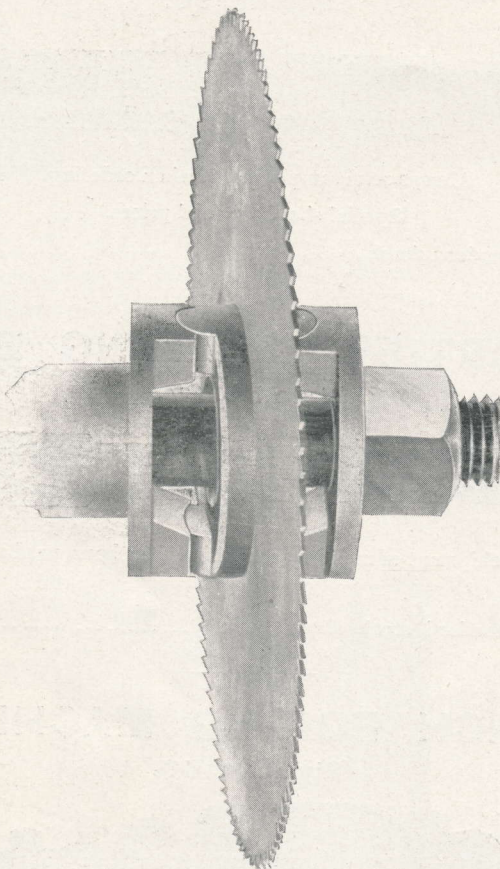
Style No. 40.



Weight 22 pounds.

List Price.....\$7 50

## Wood's Adjustable Wobble Saw Collars.



With the use of these collars a saw can be adjusted in a moment to cut a groove of any thickness according to diameter of saw used. When nut is tightened on end of arbor saw will stay accurately in place.

When it is desired to cut a groove thickness of saw, turn collars one quarter way round to milled line.

Give exact diameter of spindle when ordering.

Further particulars on application.

Diameter of Collars

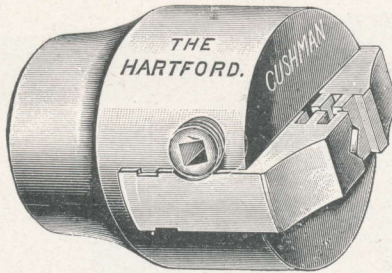
3 inches

4 "

Price per set

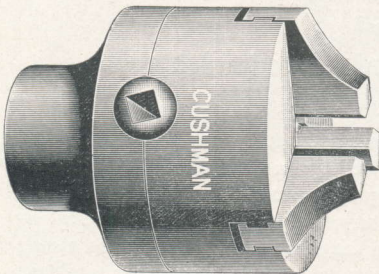
\$5 00

6 50

**The Hartford Drill Chuck.****Style No. 31.**

The working parts are made of cast-steel. It is very powerful, holds true, and will not injure the drill in any way. It will hold taps and reamers by the round or by the square part, and has no superior for wood-boring tools.

| No. | Diameter.           | Length              | Weight               | Capacity               | Price  |
|-----|---------------------|---------------------|----------------------|------------------------|--------|
| 0   | 1 $\frac{3}{4}$ in. | 2 $\frac{1}{2}$ in. | 1 $\frac{1}{4}$ lbs. | 0 to $\frac{1}{4}$ in. | \$6 00 |
| 1   | 2 $\frac{1}{8}$ in. | 2 $\frac{3}{4}$ in. | 2 $\frac{1}{4}$ lbs. | 0 to $\frac{1}{2}$ in. | 7 00   |
| 2   | 2 $\frac{7}{8}$ in. | 3 $\frac{1}{4}$ in. | 4 $\frac{1}{2}$ lbs. | 0 to $\frac{3}{4}$ in. | 8 00   |

**Key Drill Chuck.****Style No. 32.**

All working parts are of steel and interchangeable. The jaws are ground to run perfectly true after they are tempered.

No. 1, Holds 0 to  $\frac{1}{2}$ .....\$6.50

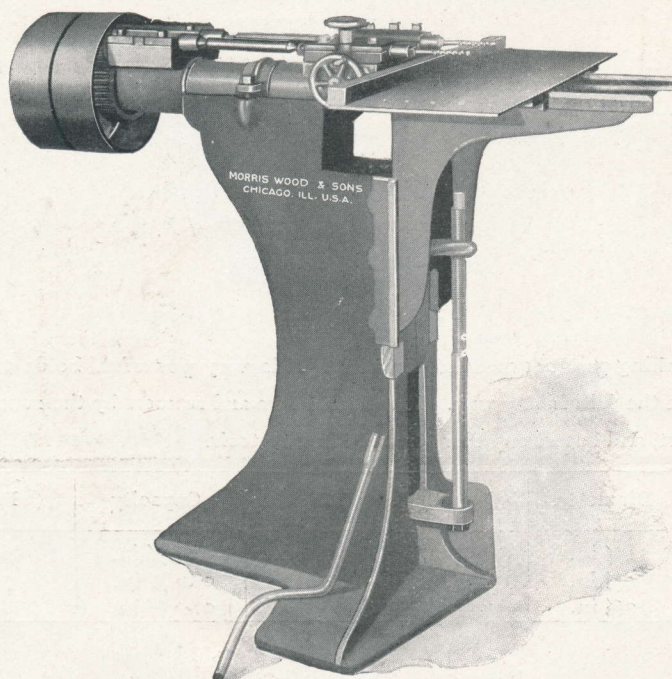
No. 2, Holds 1-64 to  $\frac{5}{8}$ ..... 8.00

**The Acme Drill Chuck.****Style No. 33.**

We recommend this chuck for light work only. This chuck is tightened by hand, no wrench being necessary.

Holds drills 0 to  $\frac{1}{2}$ ... ..Price \$4.00

## Two=Bit Boring Machine.



No. 1 "STANDARD" MACHINE.

LIST PRICE \$100.00

**For Furniture Factories, Chair Factories, Etc.**

### DESCRIPTION.

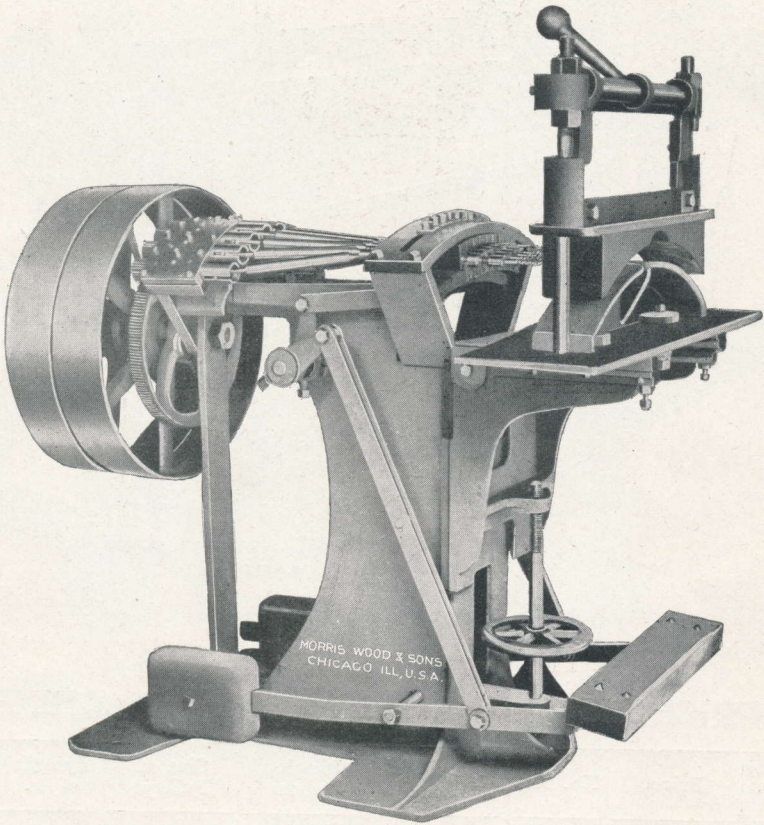
Our improved machine for dowel boring will bore accurately two holes from 1 to 6 inches apart. The adjustment of bits are all controlled by one bolt and hand wheel; no wrench being required to set the bits, effecting a great saving in the time of adjustment. The entire boring head is movable to bore at any angle, from the horizontal to vertical, by merely loosening one screw. The standard is cast in one piece, with slides also cast on. Bed is provided with removable crank wrench to raise and lower, and has a range of eight inches. Bed is provided with iron table, accurately planed and fitted on V planed ways, with adjustable stops for gauging depth of hole. The bit spindles are held in separable journals, connected to driving pinions by tumbling rods, accurately fitted with ball and pinion joints, being driven from main gear attached to driving pulley.

One joint that we would call particular attention to is that machine requires no counter-shaft, and can be driven direct from line shaft, as pulleys run but 400 revolutions per minute.

Machine is easy of adjustment and not liable to get out of repair.

Bit sockets, unless otherwise ordered, are made to fit screw shank bits.

## Multiple Chair Boring Machine.

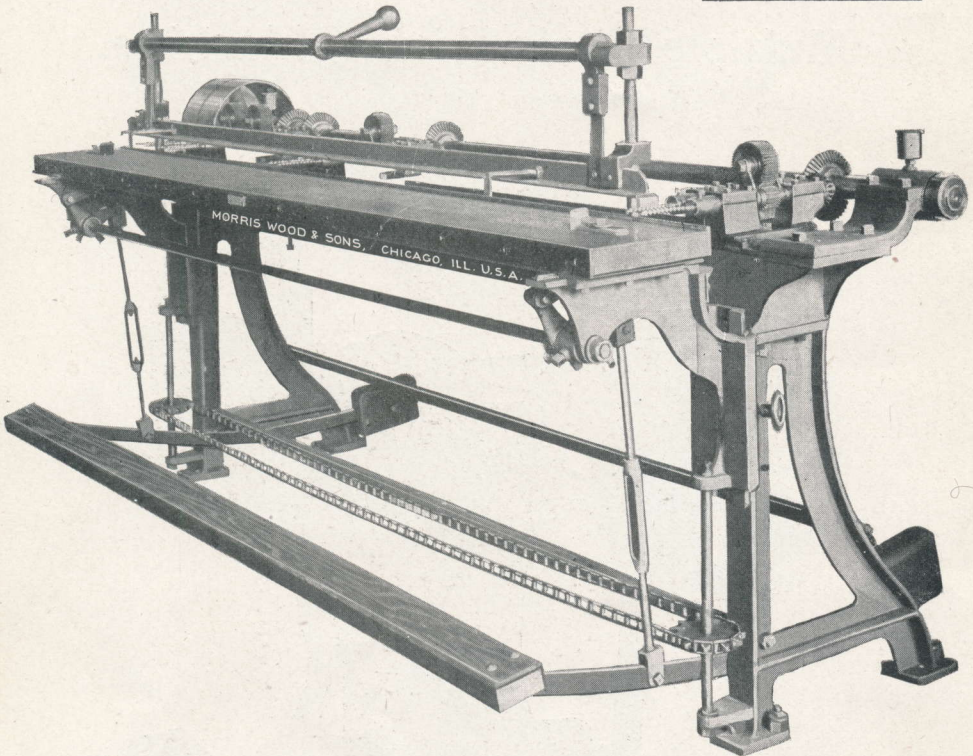


Bores entire slat at one operation. Built for any number of holes, from six to fifteen, boring from  $\frac{3}{4}$  inch, center to center of holes, and adjustable for intermediate widths up to three inches.

Spindles adjustable to bore on any angle.

Prices and further particulars on application.

# Dowell Door Boring Machine.



## NO. 12. NINE BITS.

### PRICE LIST.==MULTIPLE BORING MACHINES.

| No. | Price    | No. Bits | Compound Heads        | Single Heads | Size of Pulleys | Length of Bed | Speed |
|-----|----------|----------|-----------------------|--------------|-----------------|---------------|-------|
| 1   | \$100 00 | 2        | Standard              | Standard     | 10x3            | 6 in.         | 400   |
| 2   | 125 00   | 2        | "                     | "            | 12x3            | 10 in.        | 400   |
| 3   | 125 00   | 3        | "                     | "            | 12x3            | 6 to 10       | 400   |
| 4   | 175 00   | 3        | None                  | 3            | 12x4            | 5 ft.         | 450   |
| 5   | 190 00   | 4        | "                     | 4            | 12x4            | 5 ft.         | 450   |
| 6   | 220 00   | 6        | "                     | 6            | 14x4            | 6 ft.         | 450   |
| 7   | 240 00   | 8        | "                     | 8            | 14x5            | 6 ft.         | 450   |
| 8   | 250 00   | 5        | 2                     | 1            | 12x4            | 5 ft.         | 400   |
| 9   | 300 00   | 7        | 3                     | 1            | 12x4            | 5 ft.         | 400   |
| 10  | 350 00   | 10       | 5                     | None         | 12x5            | 6 ft.         | 400   |
| 11  | 280 00   | 10       | None                  | 10           | 16x5            | 6 ft.         | 450   |
| 12  | 400 00   | 9        | 1 Triplex<br>3 Duplex | None         | 12x4            | 6 ft.         | 400   |

Further Particulars and Discounts on Application.

## Little Giant Wood Borer.



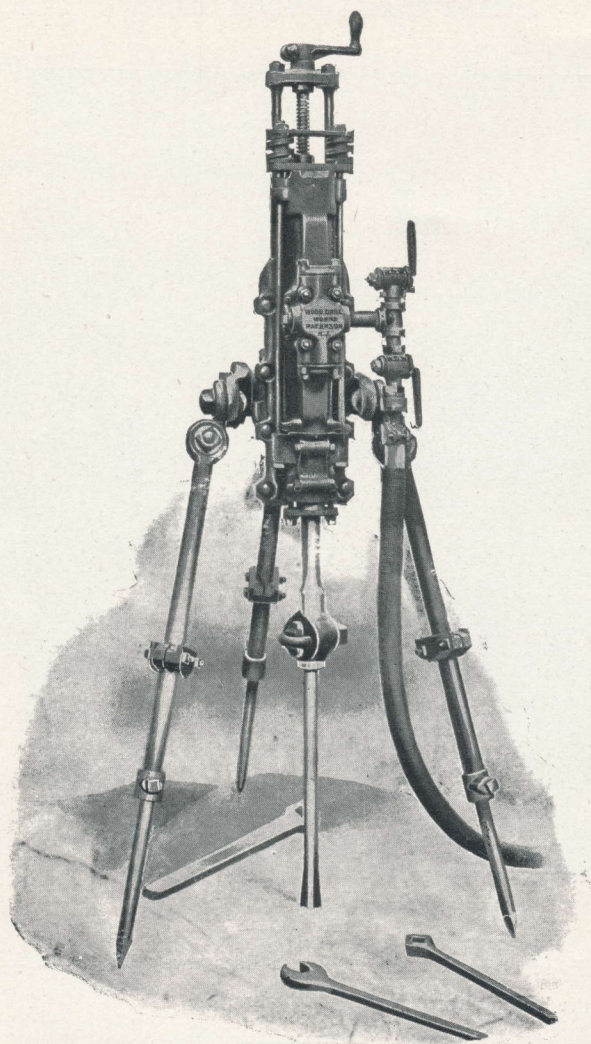
Little Giant No. 5 Wood Borer in car work.

The reversible feature of these machines does away with the former difficulty of withdrawing the bit on old types of wood borers.

### DESCRIPTION.

| No. of Machine | Weight in pounds | Cubic Ft. Free Air Required per Minute. | Capacity in Oak        | Price    |
|----------------|------------------|-----------------------------------------|------------------------|----------|
| No. 3          | 10               | 15                                      | $\frac{1}{2}$ inch bit | \$100 00 |
| " 5            | 14               | 20                                      | 2 inch bit             | 125 00   |
| " 14           | 25               | 25                                      | 4 inch bit             | 125 00   |

These machines are equally useful in screwing and tightening or unscrewing nuts and bolts.



## The Wood Rock Drill.

Ten years of successful experience has proven that the Wood Rock Drills are the best to be had.

These drills are built of steel and malleable iron throughout. May be cleaned up with a sledge hammer and wiped off with a scoop shovel, and still stay with you.

If interested send for our 40 page illustrated catalog, J. Rock Drills and Mining Machinery.

# MORRIS WOOD & SONS, CHICAGO.

We refer to any of the following parties who are using our  
Patent Countersinks and Boring Bits.

|                                       |   |   |   |   |                      |
|---------------------------------------|---|---|---|---|----------------------|
| Willingham Manufacturing Company,     | - | - | - | - | Bridgeport, Ala.     |
| W. P. Brewer,                         | - | - | - | - | Birmingham, Ala.     |
| Southern Furniture Company,           | - | - | - | - | Atlanta, Ga.         |
| National Furniture Company,           | - | - | - | - | " "                  |
| M. Schultz Company,                   | - | - | - | - | Chicago, Ill.        |
| S. R. Harsha Manufacturing Company,   | - | - | - | - | " "                  |
| M. Garrison Wood Turning Company,     | - | - | - | - | " "                  |
| Wakefield Rattan Company,             | - | - | - | - | " "                  |
| Theodore A. Koch,                     | - | - | - | - | " "                  |
| L. F. Nonnast,                        | - | - | - | - | " "                  |
| Schultz Bros.,                        | - | - | - | - | " "                  |
| E. B. Preston & Company,              | - | - | - | - | " "                  |
| The Nieman & Weinhardt Table Company, | - | - | - | - | " "                  |
| Bauerle & Stark,                      | - | - | - | - | " "                  |
| B. T. Cass & Company,                 | - | - | - | - | " "                  |
| Heywood & Morrill Rattan Company,     | - | - | - | - | " "                  |
| Johnson Chair Company,                | - | - | - | - | " "                  |
| Zangerler & Peterson Company,         | - | - | - | - | " "                  |
| W. W. Kimball Company,                | - | - | - | - | " "                  |
| Union Wire Mattress Company,          | - | - | - | - | " "                  |
| The Wells & French Company,           | - | - | - | - | " "                  |
| Continental Manufacturing Company,    | - | - | - | - | " "                  |
| George B. Weise,                      | - | - | - | - | " "                  |
| Fred Kuhn & Company,                  | - | - | - | - | " "                  |
| W. F. Schick,                         | - | - | - | - | " "                  |
| Colby & Sons,                         | - | - | - | - | " "                  |
| August Hausskee & Company,            | - | - | - | - | " "                  |
| Hermann Barth & Company,              | - | - | - | - | " "                  |
| Framke & Sievers,                     | - | - | - | - | " "                  |
| Newman Bros.,                         | - | - | - | - | " "                  |
| C. Steinmetz & Sons,                  | - | - | - | - | " "                  |
| The McEwan Manufacturing Company,     | - | - | - | - | " "                  |
| John Arndt,                           | - | - | - | - | " "                  |
| C. E. Jorgenson,                      | - | - | - | - | " "                  |
| D. W. Ryan,                           | - | - | - | - | " "                  |
| C. P. Kimball & Company,              | - | - | - | - | " "                  |
| F. Patzack & Company,                 | - | - | - | - | Grand Crossing, Ill. |
| Wakefield Rattan Company,             | - | - | - | - | Kankakee, Ill.       |
| Kankakee Manufacturing Company,       | - | - | - | - | " "                  |
| Joseph Turk Furniture Company,        | - | - | - | - | " "                  |
| Brink & Deeter Company,               | - | - | - | - | Dixon, Ill.          |
| Decatur Furniture Company,            | - | - | - | - | Decatur, Ill.        |
| Rockford Cabinet Company,             | - | - | - | - | Rockford, Ill.       |
| The Sheldon Novelty Company,          | - | - | - | - | Sheldon, Ill.        |
| H. A. Vandenboom & Company,           | - | - | - | - | Quincy, Ill.         |
| R. Alden & Sons,                      | - | - | - | - | Waukegan, Ill.       |
| J. L. Stair & Company,                | - | - | - | - | Altamont, Ill.       |
| Rockford Cabinet Company,             | - | - | - | - | Rockford, Ill.       |
| Crescent Furniture Company,           | - | - | - | - | Evansville, Ind.     |
| Evansville Furniture Company,         | - | - | - | - | " "                  |
| Karges Furniture Company,             | - | - | - | - | " "                  |
| Buhner Chair Company,                 | - | - | - | - | " "                  |
| L. Puster & Company,                  | - | - | - | - | " "                  |
| Latta Lamb Company,                   | - | - | - | - | Goshen, Ind.         |
| Nash, Knox & Hubbell Company,         | - | - | - | - | " "                  |
| Goshen Furniture Company,             | - | - | - | - | " "                  |
| The Logansport Furniture Company,     | - | - | - | - | Logansport, Ind.     |
| The Mulberry Furniture Company,       | - | - | - | - | Mulberry, Ind.       |
| Hitchcock Chair Company,              | - | - | - | - | Michigan City, Ind.  |

# MORRIS WOOD & SONS, CHICAGO.

|                                                   |   |   |   |   |   |                     |
|---------------------------------------------------|---|---|---|---|---|---------------------|
| Rushville Furniture Company,                      | - | - | - | - | - | Rushville, Ind.     |
| Anderson & Winter Manufacturing Company,          | - | - | - | - | - | Clinton, Iowa.      |
| Clement Chair Company,                            | - | - | - | - | - | " "                 |
| Dubuque Mattress Company,                         | - | - | - | - | - | Dubuque, Iowa.      |
| H. W. Klemp,                                      | - | - | - | - | - | Leavensworth, Kas.  |
| Phoenix Furniture Company,                        | - | - | - | - | - | Topeka, Kas.        |
| Abernathy Manufacturing Company,                  | - | - | - | - | - | Leavensworth, Kas.  |
| Southern Chair Company,                           | - | - | - | - | - | Louisville, Ky.     |
| Kentucky Wagon Company,                           | - | - | - | - | - | " "                 |
| Louisville Chair Company,                         | - | - | - | - | - | " "                 |
| H. Wolke & Bro.,                                  | - | - | - | - | - | " "                 |
| Harig, Koop & Company,                            | - | - | - | - | - | " "                 |
| The Wilson Lumber Company,                        | - | - | - | - | - | Paducah, Ky.        |
| F. P. Magee,                                      | - | - | - | - | - | New Orleans, La.    |
| Fairfield Furniture Company,                      | - | - | - | - | - | Fairfield, Me.      |
| The Reliable Furniture Company,                   | - | - | - | - | - | Baltimore, Md.      |
| Baltimore Mattress Company,                       | - | - | - | - | - | " "                 |
| Hagerstown Table Works,                           | - | - | - | - | - | Hagerstown, Md.     |
| Chas. Pohlman & Company,                          | - | - | - | - | - | Detroit, Mich.      |
| Passelius Bros. Furniture Manufacturing Company,  | - | - | - | - | - | " "                 |
| A. Passelius & Company,                           | - | - | - | - | - | " "                 |
| Wolverine Manufacturing Company,                  | - | - | - | - | - | " "                 |
| Adrian Furniture Manufacturing Company,           | - | - | - | - | - | Adrian, Mich.       |
| Michigan Furniture Company,                       | - | - | - | - | - | Ann Arbor, Mich.    |
| Charlotte Manufacturing Company,                  | - | - | - | - | - | Charlotte, Mich.    |
| Chas. Bennett Furniture Company,                  | - | - | - | - | - | " "                 |
| N. Harlow,                                        | - | - | - | - | - | Cold Water, Mich.   |
| W. A. Stewart,                                    | - | - | - | - | - | Flint, Mich.        |
| Stickley Bro's. Company,                          | - | - | - | - | - | Grand Rapids, Mich. |
| Michigan Chair Company,                           | - | - | - | - | - | " "                 |
| The New England Furniture Company,                | - | - | - | - | - | " "                 |
| Stow & Davis Furniture Company,                   | - | - | - | - | - | " "                 |
| J. E. Allen,                                      | - | - | - | - | - | " "                 |
| Nelson Matter Furniture Company,                  | - | - | - | - | - | " "                 |
| Berkey & Gay Furniture Company,                   | - | - | - | - | - | " "                 |
| Wm. A. Berkey Furniture Company,                  | - | - | - | - | - | " "                 |
| Grand Rapids Chair Company,                       | - | - | - | - | - | " "                 |
| Grand Rapids School Furniture Company,            | - | - | - | - | - | " "                 |
| Grand Rapids Seating Company,                     | - | - | - | - | - | " "                 |
| Gunn Folding Bed Company,                         | - | - | - | - | - | " "                 |
| McCord & Bradfield Furniture Company,             | - | - | - | - | - | " "                 |
| Phoenix Furniture Company,                        | - | - | - | - | - | " "                 |
| Sligh Furniture Company,                          | - | - | - | - | - | " "                 |
| Grand Ledge Chair Company,                        | - | - | - | - | - | Grand Ledge, Mich.  |
| Hastings Chair and Table Company,                 | - | - | - | - | - | Hastings, Mich.     |
| Bentley, Tomlinson & Rider,                       | - | - | - | - | - | " "                 |
| Ottawa Furniture Company,                         | - | - | - | - | - | Holland, Mich.      |
| Holland Furniture Company,                        | - | - | - | - | - | " "                 |
| West Michigan Furniture Company,                  | - | - | - | - | - | " "                 |
| Alpha Bending and Carriage Company,               | - | - | - | - | - | Kalamazoo, Mich.    |
| The Sargent Manufacturing Company,                | - | - | - | - | - | Muskegon, Mich.     |
| The Alaska Refrigerator Company,                  | - | - | - | - | - | " "                 |
| Lentz Table Company,                              | - | - | - | - | - | Nashville, Mich.    |
| The Otsego Chair Company,                         | - | - | - | - | - | Otsego, Mich.       |
| Robbins Table Company,                            | - | - | - | - | - | Owasso, Mich.       |
| Plainwell Church Furniture Company,               | - | - | - | - | - | Plainwell, Mich.    |
| Pentwater Bedstead Company,                       | - | - | - | - | - | Pentwater, Mich.    |
| Wait & Barnes,                                    | - | - | - | - | - | Sturgis, Mich.      |
| Aulsbrook & Sturges,                              | - | - | - | - | - | " "                 |
| Grobhiser & Crosby Furniture Company,             | - | - | - | - | - | " "                 |
| Zeeland Furniture Company,                        | - | - | - | - | - | Zeeland, Mich.      |
| Minneapolis Chair Manufacturing Company,          | - | - | - | - | - | Minneapolis, Minn.  |
| J. L. Conrad Chair and Parlor Furniture Company,  | - | - | - | - | - | St. Louis, Mo.      |
| St. Louis Refrigerator and Wooden Gutter Company, | - | - | - | - | - | " "                 |
| Powitzky & Collins,                               | - | - | - | - | - | " "                 |

# MORRIS WOOD & SONS, CHICAGO.

|                                                |   |   |   |   |   |                            |
|------------------------------------------------|---|---|---|---|---|----------------------------|
| Aude Furniture Company,                        | - | - | - | - | - | St. Louis, Mo.             |
| American Car Company,                          | - | - | - | - | - | " "                        |
| Heller & Hoffman,                              | - | - | - | - | - | " "                        |
| Brownell Car Company,                          | - | - | - | - | - | " "                        |
| St. Louis Car Company,                         | - | - | - | - | - | " "                        |
| Western Furniture Company,                     | - | - | - | - | - | " "                        |
| F. H. Logeman Chair Manufacturing Company,     | - | - | - | - | - | " "                        |
| E. N. Bowen & Company,                         | - | - | - | - | - | Fitzwilliam's Depot, N. H. |
| French & Heald,                                | - | - | - | - | - | Milford, N. H.             |
| Cortland Chair Company,                        | - | - | - | - | - | Cortland, N. Y.            |
| Steul & Thurman,                               | - | - | - | - | - | Buffalo, N. Y.             |
| Joseph J. Churchyard,                          | - | - | - | - | - | " "                        |
| The John C. Jewett Manufacturing Company,      | - | - | - | - | - | " "                        |
| Sikes Chair Company,                           | - | - | - | - | - | " "                        |
| A. Cutler & Son,                               | - | - | - | - | - | " "                        |
| Morgan Manufacturing Company,                  | - | - | - | - | - | " "                        |
| M. J. Bernhard,                                | - | - | - | - | - | " "                        |
| Queen City Furniture Company,                  | - | - | - | - | - | " "                        |
| Sauer & Hanback,                               | - | - | - | - | - | " "                        |
| Cutting & Thomas,                              | - | - | - | - | - | " "                        |
| Heinz & Munschauer,                            | - | - | - | - | - | " "                        |
| Metz & Meyer,                                  | - | - | - | - | - | " "                        |
| Black River Bending Company,                   | - | - | - | - | - | Black River, N. Y.         |
| H. C. Dexter Chair Company,                    | - | - | - | - | - | " "                        |
| Stanton Courter,                               | - | - | - | - | - | Coblesville, N. Y.         |
| Elmira Table Company,                          | - | - | - | - | - | Elmira, N. Y.              |
| The Arnold Furniture Manufacturing Company,    | - | - | - | - | - | Earlville, N. Y.           |
| A. C. Norquist & Company,                      | - | - | - | - | - | Jamestown, N. Y.           |
| Jamestown Desk Company,                        | - | - | - | - | - | " "                        |
| E. A. Ross & Son Company,                      | - | - | - | - | - | " "                        |
| Maddox, Bailey & Company,                      | - | - | - | - | - | " "                        |
| Wilkinson & Eastwood,                          | - | - | - | - | - | Binghamton, N. Y.          |
| Star Chair Company,                            | - | - | - | - | - | " "                        |
| C. Harden & Sons,                              | - | - | - | - | - | McConnellsville, N. Y.     |
| W. M. Powell & Company,                        | - | - | - | - | - | Rochester, N. Y.           |
| Coats Bros.,                                   | - | - | - | - | - | Wellsville, N. Y.          |
| The Standard Furniture Company,                | - | - | - | - | - | Cincinnati, Ohio.          |
| The B. Klinker Company,                        | - | - | - | - | - | " "                        |
| H. Closteman,                                  | - | - | - | - | - | " "                        |
| The Royer Wheel Company,                       | - | - | - | - | - | " "                        |
| Theodore Kundtz,                               | - | - | - | - | - | Cleveland, Ohio.           |
| Marble & Shattuck Chair Company,               | - | - | - | - | - | Bedford, Ohio.             |
| The Dayton Table Slide Company,                | - | - | - | - | - | Dayton, Ohio.              |
| Fremont Furniture and Cot Company,             | - | - | - | - | - | Fremont, Ohio.             |
| Findlay Table Manufacturing Company            | - | - | - | - | - | Findlay, Ohio.             |
| Columbia Carriage Company,                     | - | - | - | - | - | Hamilton, Ohio.            |
| Edna Piano and Organ Company,                  | - | - | - | - | - | Monroeville, Ohio.         |
| The Enterprise Carriage Manufacturing Company, | - | - | - | - | - | Miambsburg, Ohio.          |
| P. P. Mast Buggy Company,                      | - | - | - | - | - | Springfield, Ohio.         |
| The Sutter Barkdull Company                    | - | - | - | - | - | Shelby, Ohio.              |
| The Schauss Manufacturing Company,             | - | - | - | - | - | Toledo, Ohio.              |
| Waldecutter Stein & Company,                   | - | - | - | - | - | " "                        |
| D. Hibner & Company,                           | - | - | - | - | - | Berlin, Ont., Canada.      |
| H. Krug,                                       | - | - | - | - | - | " "                        |
| North American Bent Chair Company.             | - | - | - | - | - | Owen Sd., Ont., "          |
| Sieman & Bros. Manufacturing Company,          | - | - | - | - | - | Warton, Ont., "            |
| Bradford Hardwood Lumber Company,              | - | - | - | - | - | Bradford, Pa.              |
| Barth & Company,                               | - | - | - | - | - | Dunshore, Pa.              |
| Joseph Atkinson,                               | - | - | - | - | - | Hawley, Pa.                |
| Miller Organ Company,                          | - | - | - | - | - | Lebanon, Pa.               |
| Oil City Desk and Furniture Company,           | - | - | - | - | - | Oil City, Pa.              |
| Burrows Bros. & Company,                       | - | - | - | - | - | Picture Rock, Pa.          |
| Pack & Sons,                                   | - | - | - | - | - | Philadelphia, Pa.          |
| A. Lincoln & Son,                              | - | - | - | - | - | " "                        |
| Warren Table Works,                            | - | - | - | - | - | Warren, Pa.                |

# MORRIS WOOD & SONS, CHICAGO.

|                                           |   |   |   |   |                     |   |
|-------------------------------------------|---|---|---|---|---------------------|---|
| Pickett Extension Table Company,          | - | - | - | - | "                   | " |
| Dittmar Furniture Manufacturing Company,  | - | - | - | - | Williamsburg, Pa.   |   |
| Chattanooga Furniture Company,            | - | - | - | - | Chattanooga, Tenn.  |   |
| L. G. Fullam & Sons,                      | - | - | - | - | Ludlow, Vt.         |   |
| H. F. Cushman Manufacturing Company,      | - | - | - | - | N. Bennington, Vt.  |   |
| Parkersburg Chair Company,                | - | - | - | - | Parkersburg, W. Va. |   |
| Appleton Chair Company,                   | - | - | - | - | Appleton, Wis.      |   |
| Fond du Lac Table Manufacturing Company,  | - | - | - | - | Fond du Lac, Wis.   |   |
| Gurney Refrigerator Company,              | - | - | - | - | "                   | " |
| Janesville Chair Manufacturing Company,   | - | - | - | - | Janesville, Wis.    |   |
| North Western Wire Mattress Company,      | - | - | - | - | Kenosha, Wis.       |   |
| Marshfield Chair & Manufacturing Company, | - | - | - | - | Marshfield, Wis.    |   |
| The Blasius Table Slide Company,          | - | - | - | - | Watertown, Wis.     |   |
| Milwaukee Chair Company,                  | - | - | - | - | Milwaukee, Wis.     |   |
| Matthews Bros. Manufacturing Company,     | - | - | - | - | "                   | " |
| Mayhew Manufacturing Company,             | - | - | - | - | "                   | " |
| R. J. Washburn Lumber Company,            | - | - | - | - | "                   | " |
| Milwaukee Furniture Company,              | - | - | - | - | "                   | " |
| Banderof Chase Company,                   | - | - | - | - | Oshkosh, Wis.       |   |
| Shoate Hollister Company,                 | - | - | - | - | "                   | " |
| Wm. Schwartz Manufacturing Company,       | - | - | - | - | Plymouth, Wis.      |   |
| The Hartman Trunk Company,                | - | - | - | - | Racine, Wis.        |   |
| Racine Hardware Company,                  | - | - | - | - | "                   | " |
| American Manufacturing Company,           | - | - | - | - | Sheboygan, Wis.     |   |
| Crocker Chair Company,                    | - | - | - | - | "                   | " |
| Dillingham Manufacturing Company,         | - | - | - | - | "                   | " |
| Mattoon Manufacturing Company,            | - | - | - | - | "                   | " |
| Phoenix Chair Company,                    | - | - | - | - | "                   | " |
| Sheboygan Chair Company,                  | - | - | - | - | "                   | " |
| Sheboygan Novelty Company,                | - | - | - | - | "                   | " |
| Wisconsin Chair Company,                  | - | - | - | - | "                   | " |



## THE FOLLOWING PARTIES ARE AGENTS FOR OUR TOOLS.

|                                       |   |   |   |                     |
|---------------------------------------|---|---|---|---------------------|
| Lussky, Payn & Co.,                   | - | - | - | Chicago, Ill.       |
| Clement Vonnegut,                     | - | - | - | Indianapolis, Ind.  |
| Chas. A. Strelinger,                  | - | - | - | Detroit, Mich.      |
| Foster, Stevens & Co.,                | - | - | - | Grand Rapids, Mich. |
| The Northern Machinery Co.,           | - | - | - | Minneapolis, Minn.  |
| Hall & Brown, Wood Working Machinery, | - | - | - | St. Louis, Mo.      |
| Montgomery & Co.,                     | - | - | - | New York City.      |
| The Frank H. Clement Co.,             | - | - | - | Rochester, N. Y.    |
| O. L. Packard Machinery Co.,          | - | - | - | Milwaukee, Wis.     |

# Wood Split Pulleys

ALL SIZES IN STOCK



WRITE FOR CATALOG  
AND DISCOUNT



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